

MARKED-UP COPY OF CLAIMS

1. Device for manufacturing cushions filled with a medium from synthetic pre-processed tubular foil, to which device flexible pre-processed tubular foil is supplied in a supply direction, in which the flexible pre-processed tubular foil is supplied in flat condition, in which the pre-processed tubular foil has a first and a second longitudinal edge opposite each other, said device being provided with introduction means for introducing a medium, with cutting means for making a cut in the pre-processed tubular foil only and at least near the first longitudinal edge of the foil, the introduction means being elongated and insertable in the pre-processed tubular foil through the cut made by the cutting means for abutment of the introduction means against the part of the first longitudinal edge that is not yet cut, and with sealing means for sealing the pre-processed tubular foil in longitudinal direction and between the introduction means and the second longitudinal edge for sealing off the cut made by the cutting means.

2. Device according to claim 1, in which the introduction means is formed by a tube having [an] at least one opening[, for instance a slit or holes,] for introducing the medium into the pre-processed tubular foil[, which opening preferably faces away from the first longitudinal edge].

3. Device according to claim 2, in which [a tube is positioned for extending in an upstream direction, past the first longitudinal edge, within the tubular foil] the opening is formed by a series of holes.

4. Device according to [any one of the preceding claims, comprising means for pulling the first longitudinal edge taut] claim 2, in which the opening is formed by a slit.

5. Device according to claim [4] 2, in which the [means for pulling] opening faces away from the first longitudinal edge [taut are adapted for setting the tubular foil at an obtuse angle in the area immediately upstream of the sealing means].

6. Device according to claim [5] 2, in which [the means for pulling the first longitudinal edge taut also comprise a supply roll or holder shaft for it that is positioned

oblique with respect to the transport direction of the tubular foil at the location of the sealing means] a tube is positioned for extending in an upstream direction, past the first longitudinal edge, within the tubular foil.

7. Device according to claim [3 and claim 4, 5 or 6, in which the tube is part of the] 1, further including means for pulling the first longitudinal edge taut [and comprises two portions that are at an obtuse angle to each other].

8. Device according to claim 7, in which the [obtuse angle is approximately 175 degrees] means for pulling the first longitudinal edge taut is adapted for setting the tubular foil at an obtuse angle in the area immediately upstream of the sealing means.

9. Device according to claim [7 or] 8, in which the [obtuse angle in the tube is buckle-shaped] means for pulling the first longitudinal edge taut also comprises a supply roll or holder shaft for it that is positioned oblique with respect to the transport direction of the tubular foil at the location of the sealing means.

10. Device according to claim [6,] 7 [or 8], in which the [tube in a downstream portion of the obtuse angle is provided with the discharge opening(s)] introduction means is formed by a tube having an opening for introducing the medium into the pre-processed tubular foil, said tube being part of the means for pulling the first longitudinal edge taut and comprising two portions that are at an obtuse angle to each other.

11. Device according to claim [3 or] 10, in which the [cutting means is positioned immediately downstream of the discharge opening(s)] obtuse angle is approximately 175 degrees.

12. Device according to [any one of the preceding claims] claim 10, in which the [cutting means is positioned at the location of the upstream end of the sealing means] obtuse angle in the tube is buckle-shaped.

13. Device according to [any one of the claims 1-11] claim 10, in which the [cutting means is positioned at a distance downstream of the upstream end of the

sealing means] tube in a downstream portion of the obtuse angle is provided with the opening.

14. Device according to [any one of the preceding claims] claim 2, in which the [preprocessed tubular foil is provided with spaced apart transverse seals, each transverse seal extending from the second longitudinal edge up to a distance from the first longitudinal edge] cutting means is positioned immediately downstream of the discharge opening.

15. Device according to [any one of the preceding claims] claim 1, in which the [pre-processed tubular foil is provided with repetitive series of a number of consecutive and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge, in which at a distance from a last transverse seal of the series a triplet is situated of consecutively and spaced apart from each other a transverse seal, a row of perforations, which row extends from the first to the second longitudinal edge, and a transverse seal, the distance between a transverse seal and the row of perforations of the triplet being smaller than the distance between the neighbouring transverse seals of the number of transverse seals] cutting means is positioned at the upstream end of the sealing means.

16. Device according to [any one of the preceding claims 1, 2, 3 or 14, in which furthermore perforation means are provided for arranging a row of perforations, which row extends transverse to the supply direction] claim 1, in which the cutting means is positioned at a distance downstream of the upstream end of the sealing means.

17. [Series of cushions filled with a medium manufactured by a device according to any one of the preceding claims from synthetic pre-processed tubular foil, in which seen in cross-section each cushion comprises:

- a second closed off longitudinal edge,
- a first cut-through longitudinal edge formed by two ends situated opposite it,

and

- a longitudinal seal situated between the first and the second longitudinal edge, the medium being situated between the longitudinal seal and the second longitudinal edge] Device according to claim 1, in which the preprocessed tubular foil is provided with spaced apart transverse seals, each transverse seal extending from the second longitudinal edge up to a distance from the first longitudinal edge.

18. [Series of cushions] Device according to claim 1[7], in which the [cushions are separated one from the other by a] pre-processed tubular foil is provided with repetitive series of a number of consecutive and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge, in which at a distance from a last transverse seal of the series a triplet is situated of consecutively and spaced apart from each other a transverse seal, a row of perforations, which row extends from the first to the second longitudinal edge, and a transverse seal, the distance between a transverse seal and the row of perforations of the triplet being smaller than the distance between adjacent ones of the transverse seals.

19. [Series of cushions according to claim 17 or 18, in which the cushions are separated one from the other by a row of transverse perforations] Device according to claim 1, further including perforation means for arranging a row of perforations, which row extends transverse to the supply direction.

20. [Cushion] Series of cushions filled with a medium manufactured by a device according to [any one of the preceding claims 1-16] claim 1 from synthetic pre-processed tubular foil, in which [seen in cross-section] each cushion comprises:

[-] a second closed off longitudinal edge,

[-] a first cut-through longitudinal edge formed by two ends situated opposite it, and

[-] a longitudinal seal situated between the first and the second longitudinal edge, the medium being situated between the longitudinal seal and the second longitudinal edge.

21. [Pre-processed tubular foil provided with a first and second longitudinal edge opposite each other and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge] Series of cushions according to claim 20, in which the cushions are separated one from the other by a transverse seal.

22. [Pre-processed tubular foil provided with a first and a second longitudinal edge opposite each other and repetitive series of a number of consecutive and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge, in which at a distance from a last transverse seal of the series a triplet is situated of consecutively and spaced apart from each other a transverse seal, a row of perforations, which row extends from the first to the second longitudinal edge, and a transverse seal, the distance between a transverse seal and the row of perforations of the triplet being smaller than the distance between the neighbouring transverse seals of the number of transverse seals] Series of cushions according to claim 20, in which the cushions are separated one from the other by a row of transverse perforations.

23. Cushion filled with a medium manufactured by a device according to claim 1 from synthetic pre-processed tubular foil, in which the cushion comprises:

a second closed off longitudinal edge,

a first cut-through longitudinal edge formed by two ends situated opposite it,
and

a longitudinal seal situated between the first and the second longitudinal edge,
the medium being situated between the longitudinal seal and the second longitudinal edge.

24. Pre-processed tubular foil provided with a first and second longitudinal edge opposite each other and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge.

25. Pre-processed tubular foil provided with a first and a second longitudinal edge opposite each other and repetitive series of a number of consecutive and spaced apart transverse seals, in which each transverse seal extends from the second longitudinal edge up to a distance from the first longitudinal edge, in which at a distance from a last transverse seal of the series a triplet is situated of consecutively and spaced apart from each other a transverse seal, a row of perforations, which row extends from the first to the second longitudinal edge, and a transverse seal, the distance between a transverse seal and the row of perforations of the triplet being smaller than the distance between adjacent ones of the transverse seals.

26. Device according to claim 7, in which the means for pulling the first longitudinal edge taut includes means for holding a supply roll of the tubular foil obliquely with respect to the transport direction of the tubular foil at the location of the sealing means.